

ABSTRACT OF THE DISCLOSURE

Squirrel cage type asynchronous motors such as alternating current induction motors and high speed asynchronous induction motors having a unitary rotor and shaft assembly and a method of making such a one piece, solid rotor and shaft to achieve a more stable and higher strength rotor and shaft with an increased critical frequency. The solid rotor and shaft includes a central rotor portion having a substantially larger diameter than the opposing shaft portions extending from either end of the rotor portion. Conductor bar passages are formed adjacent the outer circumferential surface of the rotor portion to accept the respective number of conductor bars making up the secondary winding in the solid rotor and shaft.

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